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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,938	07/28/2003	Sang-Won Chung	LNK-0051	9098

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CANTOR COLBURN LLP
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EXAMINER
WOO, ISAAC M

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
 Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>30 May 2006</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14, 16-48 and 58-65* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 2, 6-10, 12-14, 17-19, 23, 27-30, 32, 36-39, 44-47, 58 and 62* is/are rejected.

7)☒ Claim(s) *3-5, 11, 20-22, 24-26, 31, 33-35, 40-43, 48, 59-61 and 63-65* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to Applicant's Amendments, filed on May 30, 2006

have been considered but are deemed moot in view of new ground of rejections below.

2.   Claims 1-4, 6, 13, 18, 32-40 and 62-65 are amended. Claims 15 and 49-57 are

canceled. Claims 1-14, 16-48 and 58-65 are pending and presented for examination.

Claim Objections

3.   Claims 1 is objected to because of the following informalities:

Claim 1 recites. "tot eh" in line14, should it be, -- to the --?;

Claim 15 has been canceled, however, claim 16 is still dependent on claim 15,

thus, claim 16 should be canceled also.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-2, 6-10, 12, 17-19, 23, 27-30, 58 and 62 are rejected under 35 U.S.C.

103(a) as being unpatentable over Leber et al (U.S. Pub. No. 2003/0233455,

hereinafter, "Leber") in view of Heath et al (U.S. Patent No. 6,006,034, hereinafter,

"Heath") further in view of Ellison et al (U.S. Patent No. 5,475,860, herein after,

"Ellison").

        With respect to claim 1, Leber teaches distributing files and transmitting/receiving

the distributed files (100, distributed file sharing system in fig. 1, fig.2, page 1, section

0001, page 7, section 0113, page 3, section 0054), Leber teaches a file

distribution/transmission/reception module (i.e., File Retrieval Software Application, 135

in fig. 1, fig. 1a, page 4, sections 0066-0068) depending an application program

executable (operating system application executed, page 1, section 0003) in a client

computer (105, fig. 1, page 3, section 0061), (i.e., distributed file sharing system

depends upon operating system program application, thus, distributed file sharing

system is unable to run without operating system program application, page 3, section

0003), Leber teaches the file distribution/transmission/reception module (i.e., File

Retrieval Software Application, 135 in fig. 1, fig. 1a, page 4, sections 0066-0068)

receiving files designated by a host computer (i.e., server computer, 110, fig. 1,

designates clients that have requested files, page 4, section 0066) from a network (i.e.,

120, global computer network, internet in fig. 1, page 3, section 0054), (i.e., client 105,

in fig. 2, receives the requested files designated by the server computer, in steps 215

and 220 in fig. 2, page 4, sections 0072-0073, abstract), and storing the received files

(in step in 220, fig. 2, page 4, sections 0072-0073) while an application program is

executed (i.e., while operating system application running, page 1, section 0003) or

transmitting corresponding files to another client computer (i.e., client, 105, receives

requested files from other client, in step 220 in fig. 2) if the corresponding files exist, in

response to another client computer's request (client, 105, requests files to other client,

115, in step 215 in fig. 2) for transmission of the files designated by the host computer

(i.e. server computer, 110, fig. 1, designates client computers that have requested files,

page 4, section 0066, page 4, section 0072), (page 4, sections 0071-0073). Leber

discloses the file distribution/transmission/reception module (i.e., File Retrieval Software

Application, 135 in fig. 1, fig. 1a, page 4, sections 0066-0068). Leber does not explicitly

disclose performed in a background process of a corresponding application program

execution module. However, Heath teaches performed in a background process (col. 2,

lines 63-67 to col. 3, lines 1-6) of a corresponding application program execution

module (i.e., launcher program performs file distribution/transmission/reception function

for application program and runs in a background process of corresponding application

program, col. 2, lines 52-67 to col. 3, lines 1-6, fig. 3C, col. 5, lines 30-40). Therefore,

based on Leber in view of Heath, it would have been obvious to a person having

ordinary skill in the art at the time of the invention was made to utilize the teaching of

Heath to the system of Leber in order to provide separate utility program or functional

component of an operating system application of the client (col. 3, lines col. 2, lines 52-

67 to col. 3, lines 1-6). Lever and Heath do not explicitly disclose a CPU occupancy

ratio of the file distribution/transmission/reception module is relatively smaller that the

application program execution module such that influence of the file

distribution/transmission/reception module executed in the background process with

respect to the application program execution module executed in the foreground

process can be minimized. However, Ellison discloses to minimize CPU usage and

therefore want to process MDB callback in the background (col. 34, lines 36-49). This

teaches that the background process's occupancy ratio is relatively smaller than

foreground process's occupancy ratio and the background process minimizes the CPU

usage. Therefore, based on Leber in view of Heath further in view of Ellison, it would

have been obvious to a person having ordinary skill in the art at the time of the invention

was made to utilize the teaching of Ellison to the system of Leber in order to provide

efficient CPU utilization with background process.

With respect to claim 2, Leber teaches the file distribution/transmission/reception

module sends a request for the transmission of the files designated on the host

computer to at least one client computer connected to a sub-network (i.e., client

computer,105, requests files to other client according to client list that has files sent by

server (files designated by the server), 115, in step 215 in fig. 2, page 4, section 0072),

and receives corresponding files from a client computer selected from among client

computers, connected to the sub-network (i.e., peer client computer, page 4, section

0072), responsive to the file transmission request (i.e., client 105, receives the

requested files designated by the server computer, 220 in fig. 2, page 4, sections 0072-0073, abstract).

With respect to claim 6, Leber discloses the claimed subject matter as discussed above except in a predetermined folder. However, Heath discloses predetermined folder (i.e., packaging a catalog file received from computer (fig. 2A-B) specifies client download directory (folder) location, 320, Fig. 3A, col. 4, lines 59-67). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to store the received file for proper execution on the client (col. 2, lines 15-24).

With respect to claim 7, Leber discloses the claimed subject matter as discussed above except updated files for the application. However, Heath discloses updated files (i.e., new catalog files (latest component version) downloaded, 352 in fig. 3D, col. 5, lines 41-57) for the application (i.e., updated catalog file is used for application program updating, col. 2, lines 6-15). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to update old application program (col. 2, lines 6-15).

With respect to claim 8, Leber does not explicitly disclose update execution module for updating the application program execution module using stored update files at an update time. However, Heath discloses update execution module for updating the application program execution module using stored update files (i.e., downloaded updated catalog file includes executable code to update application program, col. 1, lines 55-67 to col. 2, lines 1-5) at an update time (update application time is specified in catalog file, col. 2, lines 46-52). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to provide efficient time management for dynamic application program deployment and updating (col. 1, lines 33-55).

With respect to claim 9, Leber discloses the claimed subject matter as discussed above except associated with an installation or execution of another application program. However, Heath discloses associated with an installation (i.e., downloaded catalog file is used for installation of application program, col. 2, lines 6-15, col. 5, lines 41-54, col. 5, lines 61-67) or execution of another application program (Heath discloses associated with an installation, as discussed above). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to provide dynamic application program deployment and updating (col. 1, lines 33-55).

With respect to claim 10, Leber discloses the claimed subject matter as discussed above except data files readable by the application program or other application program. However, Heath discloses data files readable by the application program (i.e., catalog file components include data files of the application program, col. 1, lines 56-67 to col. 2, lines 1-5) or other application program (Heath discloses data files readable by the application program, as discussed above). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to provide dynamic application program deployment and updating (col. 1, lines 33-55).

With respect to claim 12, Leber discloses the file distribution/transmission/reception module checks a file transmission error for completely received files (i.e., checksum code is used for file transmission completion, page 5, section 0076) when the application program is executed (i.e., operating system application executed, page 1, section 0003) such that a corresponding file can be re-transmitted when the corresponding file is erroneous (page 5, sections 0076-0079).

With respect to claim 17, Leber discloses the claimed subject matter as discussed above except updates information of a file transmission state and then the updated information is stored. However, Heath teaches updates information of a file

transmission state and then the updated information is stored (col. 3, lines 7-20, col. 5, lines 40-54, fig. 2B, col. 4, lines 65-67 to col. 5, lines 1-13). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to keep the updated version of application program.

With respect to claim 18, Leber does not explicitly disclose a list of files designated by the host computer is received from the host computer every time the application program is accessed. Heath discloses a list of files designated by the host computer is received from the host computer every time the application program is accessed (i.e., launcher program is defaults to run automatically for retrieving catalog files when application program executed (accessed) in col. 7, lines 50-55, fig. 6A-B). Therefore, based on Leber in view of Heath, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Heath to the system of Leber in order to keep the updated version of application program.

The limitation of claim 19 is rejected in the analysis of claim 6 above, and this claim is rejected on that basis.

The limitations of claims 23 and 27-30 are rejected in the analysis of claim 12 above, and this claim is rejected on that basis.

The limitation of claim 58 is rejected in the analysis of claim 17 above, and this claim is rejected on that basis.

The limitation of claim 62 is rejected in the analysis of claim 18 above, and this claim is rejected on that basis.

6.   Claims 13, 32 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leber et al (U.S. Pub. No. 2003/0233455, hereinafter, "Leber") in view of Heath et al (U.S. Patent No. 6,006,034, hereinafter, "Heath") in view of Ellison et al (U.S. Patent No. 5,475,860, herein after, "Ellison") and further in view of Henry (U.S. Pub. No. 2003/0182436).

With respect to claim 13, Leber the claimed subject matter as discussed above except transmission priority for client computer. However, Henry discloses files have transmission priority for client computer (i.e., file priority determination module (218 in fig. 2) is used to prioritize the files for transmission to network clients, 506-508 in fig. 5, page 4, sections 0049-0050). Therefore, based on Leber in view of Heath, in view of Henry, and further in view of Ellison, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Henry to the system of Leber in order to provide efficient network traffic control with file transmission priority in network communication environment (page 1, sections 0003-0005).

The limitations of claims 32 and 36-39 are rejected in the analysis of claim 13

above, and this claim is rejected on that basis.

7.   Claims 14 and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Leber et al (U.S. Pub. No. 2003/0233455, hereinafter, "Leber") in view of Heath et

al (U.S. Patent No. 6,006,034, hereinafter, "Heath") in view of Ellison et al (U.S. Patent

No. 5,475,860, herein after, "Ellison") and further in view of Fanning et al (U.S. Pub. No.

2002/0055920, hereinafter, "Fanning").

With respect to claim 14, Leber discloses the file

distribution/transmission/reception module (100, distributed file sharing system in fig. 1,

fig.2, page 1, section 0001, page 7, section 0113, page 3, section 0054) carries out

offset division operation for a corresponding file on the basis of the number of client

computer responsive to the file transmission request (630 in fig. 6) (i.e., any peer client

computer that receives the message and actually has a copy of the requested file or

part of it, it sends positive response to requesting client computer in fig. 6, page 6,

sections 0099-0100), receives data of different offset areas from the responsive client

computers (635 in fig. 6, page 6, section 0101), combines items of the data of the

different offset area into a single file (640 in fig. 6, page 6, section 0102) and stores the

file (670 in fig. 6, page 6, section 0106). Neither explicitly disclose within a

predetermined time. However, Fanning teaches the predetermined response time

specified to receive files only from service providers that response within the

predetermined time in Internet (page 1, sections 0015-0018, section 0033). Therefore, based on Leber in view of Heath in view of Ellison and further in view of Fanning, it would have been obvious to a person having ordinary skill in the art at the time of the invention was made to utilize the teaching of Fanning to the system of Leber in order to prune the low bandwidth service provider computers to improve file transmission efficiency in peer-to-peer communication environment (page 1, sections 0011-0012).

The limitations of claims 44-47 are rejected in the analysis of claim 14 above, and this claim is rejected on that basis.

Allowable Subject Matter

8.   Claims 3-5, 11, 20-22, 24-26, 31, 33-35, 40-43, 48, 59-61 and 63-65 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 3 identifies the distinct feature that the file transmission request is sent to other client computers connected to the host computer, if no client computer connected to the sub-network is responsive to the file transmission request, then corresponding files are received from a client computer selected from among the other computers, connected to the host computer, responsive to the file transmission request. The closes prior arts, Leber et al (U.S. Pub. No. 2003/0233455) and/or Heath et al (U.S. Patent No.

6,006,034), disclosing the file transmission request is sent to other client computers connected to the host computer, fail to suggest the claimed limitations as mentioned above in combination with other claimed elements. Claims 4-5, 20-22, 24-26, 31, 33-35, 40-43, 48, 59-61 and 63-65 further depending from claim 3 are also objected.

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Isaac Woo
August 16, 2006